

## **T Cells Specific for Target Antigens and Methods and Vaccines Based Thereon**

### ***Abstract***

5 The present invention relates to novel methods for the identification of  
antigens recognized by cytotoxic T cells (CTLs) and specific for human tumors,  
cancers, and infected cells, and the use of such antigens in immunogenic  
compositions or vaccines to induce regression of tumors, cancers, or infections  
in mammals, including humans. The invention encompasses methods for  
induction and isolation of cytotoxic T cells specific for human tumors, cancers  
10 and infected cells, and for improved selection of genes that encode the target  
antigens recognized by these specific T cells. The invention also relates to  
differential display methods that improve resolution of, and that reduce the  
frequency of false positives of DNA fragments that are differentially expressed  
in tumorous, cancerous, or infected tissues versus normal tissues. The invention  
15 further relates to the engineering of recombinant viruses as expression vectors for  
tumor, cancer, or infected cell-specific antigens.